

James Wright Clarke 1844 - 1912

Founder and First President of
The National Association of Plumbing Teachers

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James Wright Clarke was born in the small village of Wainfleet All Saints, Lincolnshire in 1844, a short distance away from the coastal holiday resort of Skegness. Some 16 years earlier, in 1828, in another small Lincolnshire village, Bolingbroke, Daniel Clarke, James's Uncle was born. It would be his Uncle Daniel who would eventually lead James into his illustrious plumbing career.

It was during this period that Britain's first Polytechnic opened on 6th August 1838 at 309 Regent Street in London. Sir George Cayley, landowner and gentleman scientist, was the first Chairman, and over the coming decades, the Institution would make a major contribution to the development of technical and scientific education. Who would have thought then that this Polytechnic would later play such a major role in the life of James Wright Clarke, a humble apprentice from Lincolnshire?

James came from a poor and unhappy family background and around the age of 14 was living with his Uncle Daniel, who was a plumber and working permanently with him as his apprentice.

It is very hard to imagine today, the type of work a country plumber and his "mate" would be carrying out at that time and James would later recall, amongst other things, that *"as a boy he was always fascinated by the workings of the hydraulic ram"*. Around 1858-9 his Uncle Daniel decided to move down to London where work was more plentiful. By 1861, when James was 17 years old, he and his Uncle were living at 10 Booths Place in Marylebone and were carrying out various plumbing jobs around the area. James had been apprenticed to him since about 1859.

Within a few years of working with his Uncle in London, his Uncle Daniel became seriously ill and died very suddenly leaving young James again to fend for himself. James set about visiting other London plumbers that his Uncle Daniel had known to seek further employment and to try to continue his apprenticeship in plumbing. It would have been at this difficult time when James would remember his Uncle and what a taskmaster he had been. There were many times during his early apprenticeship he threatened to run away from his



James Wright Clarke

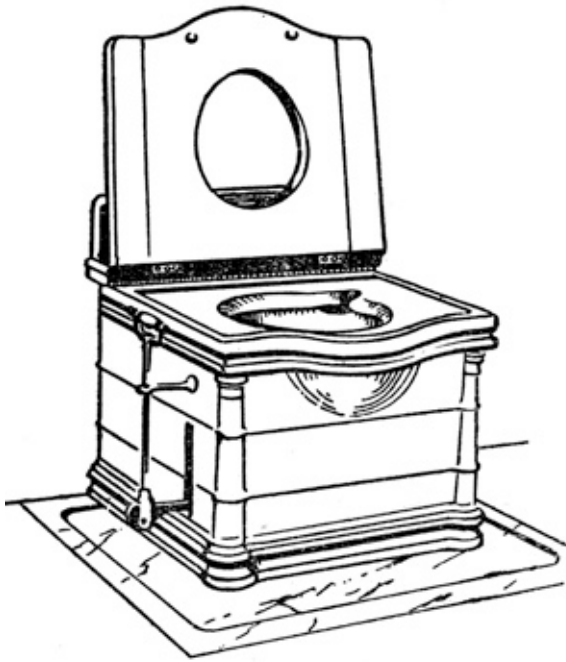
Uncle Daniel due to the extremely hard and dirty work that he was given. It wouldn't be until much later in life that he would remember, with gratitude, that he was taken on as an apprentice without a premium, which just kept him from starvation and an unhappy young life. James would also look upon this as the most valuable training he ever had. He persevered in search of work, eventually finding Mr Henry Phelps, a 42-year-old Plumber, Painter and Glazier at Castle Street East in London who was willing to employ him and continue his apprenticeship. Henry Phelps had a young son who in later in life would also become a plumber.

Henry Phelps address was just a short distance away from the Regent Street Polytechnic, where James would much later commence his teaching career.

On completing his plumbing training with Henry Phelps, James Wright Clarke commenced work with the firm of Beard and Dent in 1864-5.

Beard and Dent were major contractors for plumbing works at nearly all the Government offices and Royal palaces. They were a very old established and well-respected plumbing company that was founded in 1730 and James would remain in their employment, except for a small break, for a further 30 years. He first reported to their premises at 21 Newcastle Street, Strand and one of the first contracts that James was put to work on was St James's Palace. This contract included the fitting of

numerous plumbing arrangements including the Company's famous patented "Optimus" valve water closet.



The Optimus Valve Closet

The "Optimus" closets were also installed by the company in Buckingham Palace, Sandringham, Windsor Castle, Balmoral Castle and leading mansions throughout the country.

Their workshop was famously known by all plumbers who worked for them as "*The Old Plumber's Shoppe*".

William Dent was the original founder of the company and commenced his own plumbing apprenticeship in 1706 and within a few years of completing his apprenticeship, moved down to London. The company had a number of name changes over the years, but the Dent family name was always there.

The final company name change came in 1874, when Samuel Stevens Hellyer became a partner in the company, hence the renowned name of Dent and Hellyer. The company ceased trading in 1956 as Dent and Hellyer Sanitation Limited and this was the very last time that plumbing operatives were employed.

Around 1867-8 James had a wage dispute with his employers and he decided to leave.

He had previously worked all around the Marylebone area of London with his Uncle Daniel and Henry Phelps so knew many of the other plumbing employers and naturally wanted to work for the best company possible. After a short time of searching he managed to secure employment

with Mathew Hall, a master plumber, employing 9 plumbers and 5 boys, he had a leadwork business in Marylebone Lane. Once again James would unknowingly be working for yet another famous plumbing icon. Established in 1848, the Matthew Hall name would still be in existence up until the year 2003, when the name was finally incorporated into the AMEC group of companies. It was in these workshops that a Mr Woodbridge who started as an apprentice with Matthew Hall cast in lead the cross on the highest point of Westminster Cathedral.

The employment with Matthew Hall was for some reason only short lived, and any differences he may have had with Beard and Dent previously seemed to have been resolved, he therefore soon resumed his employment with them.

His first job on his return was to be the company's new contract at St Thomas's Hospital under the supervision of their foreman, a Mr Busbridge.

In 1869 James married Martha Baglin in St Pancras. She was a lace mender and before her marriage Martha lived with her Father and her younger brother at 34 Charlotte Street Marylebone London. They commenced their married life a short distance away at 185 Pentonville Road, Islington London. They had their first child Ellen in 1870, a second Frederick in 1872 and a third William, in 1874.

We now come to the important year of 1878 when The City and Guilds of London Institute was founded at a meeting at the Mansion House by the Corporation of the City of London and the City Livery Companies. It was said for the purpose of "*all such branches of science and the fine arts as benefit or are of use or may benefit or be of use to productive and technical workers, especially to commerce and industry generally...*" All for the education and training of a wide range of occupations including "*Plumbing Work*" in their list of examination subjects and proved to be the start of a very successful venture.

The City and Guilds of London Institute were to receive some £800,000 from the City Companies between 1878 and 1909.

In Nov 1878 James applied for and became a Freeman of the City of London. This was certainly the beginning of his close links to the City of London and with the Worshipful Company of Plumbers'.

Also in 1878 the first City and Guilds plumbing classes were held at Battersea and James was naturally attracted to these classes as he regarded them as an important step in the direction to which

he was striving. It is very hard to imagine today that his teacher at that plumbing class was actually a carpenter! His teacher would very shortly discover that his student could teach him more than he could possibly conceive for himself. It was certainly no coincidence that James Wright Clarke would soon assume a position as a teacher as a natural progression and in 1880 James first commenced writing his famous articles on practical and technical plumbing for an American Journal "*The Engineering and Building Record*".

James and his family moved South of the River Thames in 1881 and were living at 64 Holden Street on the Shaftsbury Park Estate, Battersea, London. This estate was built in the 1870's by the "*Artisans', Labourers and General Dwellings Company*" to provide good quality homes for workers.

It was during this period Mr Quintin Hogg; a businessman with a great interest in education acquired the building at 309 Regent Street. He had been working amongst the poor and working people of London for almost 20 years and running his Young Men's Christian Institute in Covent Garden since 1871.

The Regent Street Polytechnic reopened in 1882 and soon developed an international reputation and became a model for technical education across London. His vision of "The Polytechnic" was to educate "*mind, body and spirit*".

At the first technological examination in Plumbing Work that was held at the City and Guilds of London Institute in 1881, eighteen persons passed the examination in Plumbers work, three of which received prizes, the first being James Wright Clarke, he received £5 and a bronze medal.

A plumber's wage at that time was about 10d per hour.

James had now worked his way up through the ranks from a journeyman to foreman plumber with Dent and Hellyer and while still in their employ joined the teaching staff of the Regent Street Polytechnic. He completed many contracts for the company, one of the first being a large country house, Cowdray Park in Midhurst, West Sussex only a short distance away from the Weald and Downland open air Museum, Singleton where the Worshipful Company of Plumbers have their workshop and where many plumbing teachers have carried out practical demonstrations since it's opening in 1980.

In 1882, it was resolved on a motion from Mr George Shaw, Past Master of the Worshipful Company of Plumbers' that Mr. Clarke "*having passed in the first and second classes with honours had qualified himself to receive the Freedom of the Company.*" In February 1883 he was presented with his Freedom certificate of the Worshipful Company of Plumbers' in the Guildhall Tavern in the City of London and just over a year later, in April 1884, he duly became a Liveryman of the Worshipful Company of Plumbers', a membership he would hold and respect for the rest of his life.

When the new plumbing courses were first envisaged by the Regent Street Polytechnic, early in 1882, P J Davies the well-known plumber and sanitary writer formed a syllabus to be taught, namely "*Plumbing Practical and Technical*". This course was available on a day basis to members for 4/-, or to non-members for 10/6d, including tools. The non-members were mainly "*young men prevented by age or other causes from joining the Institute may attend classes on these terms*".

P J Davies only taught at the Regent Street Polytechnic for a couple of months or so and it was then that James Wright Clarke took over from him, ably assisted by his friend and colleague Mr George Taylor.



The Plumbing Workshop, J Wright Clarke in the foreground

He began teaching the practical trade of plumbing and also took technical classes under the City and Guilds at the beginning of a period of very rapid growth. It was the first time the subject of Plumbing, Metal Plate Work and Mechanical Engineering had been taught at the Polytechnic.

The Regent Street Polytechnic kept its name from 1881 up until 1970 and finally in 1992 was named The University of Westminster. Their motto being "*Educating for professional life*".

In 1886, when the "Registration of Plumbers" was formed by the Worshipful Company of Plumbers', James Wright Clarke represented the operative plumbers on the first Registration Committee, under the Chairmanship of their Master Mr George Shaw CC. Plumbers who passed their practical examination at their workshops in Kings College, Strand, were recorded in the register and given the title RP.

In 1888 James and his growing family moved house again to 17 Shelgate Street, in Clapham. In the same year he published his first book the "*Engineering and Building Record*"

Sad news was recorded in September 1890. James's eldest son Frederick, just 18 years of age, died in a drowning accident whilst swimming at Brighton.

Despite his family problems, James continued his advancement in Dent and Hellyer, finally becoming their Assistant Consulting Engineer and Superintending Sanitary Engineer. He was their first engineer who actually designed plumbing and heating schemes in conjunction with architect's requirements and so procured work for Dent and Hellyer.

CLARKE'S
POCKET BOOK
FOR
PLUMBERS, ARCHITECTS,
SANITARY ENGINEERS,
&c., &c.

A COLLECTION OF
TABLES AND MEMORANDA
CALCULATED & COMPILED BY
J. WRIGHT CLARKE,
PLUMBER, Plumbing Instructor to the
Polytechnic, London.
Author of "Plumbing Practice."

LONDON:
R. J. BUSH,
92 & 93, FLEET STREET, E.C.
1892.

The cover of Clarke's Tables

In 1891 he then published "*Clarke's Pocket Book for Plumbers, Architects, Sanitary Engineers, etc*", generally known as "Clarke's Tables" which has been reprinted on numerous occasions over the years. W J Woolgar, The National Associations' 1st Honorary President, produced an enlarged 10th edition in 1954; he was head of the plumbing

department at the Northern Polytechnic Holloway, London for many years. The original very tiny book, measuring barely 70mm x 50mm contained some 320 pages of just about everything, plumbing, electrical, building, heating, gas fitting, telephones etc etc and an untold amount of tables and conversion factors.

This was a time when there was a great demand for men who were competent to examine test and report on sanitary arrangements and James being well in advance of the trade in technical knowledge and experience was naturally called upon to carry out this kind of work. This led Dent and Hellyer to the form an engineering department which James held leading position within the Company.

Later in 1893 he published his illustrated "*Lectures to Plumbers*". In the preface in this book, he says, "*Experience shows that practitioners of standing and repute are still "students," and as such, whether Plumbers or Sanitary Engineers, who do not believe they already, 'know it all,' this book is dedicated.*"

James Wright Clarke left the employment of Dent and Hellyer in 1894, at the age of 50, leaving many productive years behind him to concentrate totally on his teaching and writing, but would still keep a very close relationship with them throughout the remainder of his life.

In 1896 he again moved home, just a short distance away from Shelgate Street to No 8 Salcott Road, Wandsworth, where he would remain for the rest of his days.

It wasn't until later life that James became interested in Freemasonry and became a member of the Robert Mitchell Lodge. He was also a Companion of the Quintinian Chapter, named after Quintin Hogg the businessman who acquired 309 Regent Street in 1881.

In 1898 he published his book entitled "*Pumps, their Principal and Construction etc*"

In 1900, James was elected President of the Polytechnic's Architectural and Engineering Society and in the same year published his book, on "*Hydraulic Rams, their Principal and Construction etc*". The contents of this book always intrigued him from his early apprenticeship days in Lincolnshire.

1903 saw the last of James Wright Clarke's published books namely "*Practical Science for Plumbers and Engineers etc*"; and in the same year he received the sad news that his close friend Quintin Hogg, had died. The Institution continued

to flourish under the direction of his friends and colleagues Robert Mitchell and Kynaston Studd. Also in 1903 Dent and Hellyer were forced to move offices due to the Kingsway and Aldwych redevelopment scheme, they relocated to 35 Red



A typical bookplate inside one of Clarke's books given as prizes to students.

Lion Square. The "Old Plumbers Shoppe" was no more.

J Wright Clarke still kept in touch with the Company after their move and continued for many years to go on their annual outings.

In 1906 the Registration Committee of the Worshipful Company of Plumbers' were still examining men for "Registration" at their workshops at Kings College. They were also finding "*a low standard of efficiency shown by the candidates in the practical tests*". During the June meeting of Registration Committee in 1906, James W Clarke and other members of the committee expressed an opinion that "*it was desirable that applicants for examination should be required to furnish some evidence or qualification of having attended plumbing classes in order that they may be better prepared for examination*". 8 Masters and 23 Operatives had presented themselves for the June examination and only 6 Masters and 6 Operatives passed.

James's concern about the quality of plumbing training and his experience over many many years made him an ideal candidate to examine operative

plumbers before they applied to be further examined under the Worshipful Company of Plumbers' registration scheme, to become a "Registered Plumber".

At the 1906 October meeting of the Registration Committee, held in Adelaide Buildings, London Bridge, James W Clarke informed the committee of his wish to resign his committee membership.

Along with Mr T Fretwell, he wanted plumbing apprentices and operatives at all Polytechnics and Institutions throughout the country to be trained in the same manner and to the same standards. To attempt to achieve this major task they contacted numerous plumbing colleges the length and breadth of the country with an aim form an Association of Plumbing Teachers. A journal letter records.....

Dear Sir

A consultation having taken place between several teachers in London and the suburbs, they considered it desirable that owing to the recent changes in matters connected with the teaching of the trade, a general meeting should be called with a view to the organisation of teachers and discussing other matters of interest to them.

A circular proposing such a meeting having been sent out and replies in all cases having been favourable, a meeting has been arranged for Saturday 31st August. To such meeting a few teachers from the provinces promise to give their support.

August 12th 1907 JWC

The response was excellent, they had replies from, A J Clark, and A W Walter, Sir John Cass Institute; J S Clements, Northampton Institute; J W Hart Goldsmiths College and Croydon Polytechnic; A E Hudson, Cheltenham Technical Institute; C Riches, Norwich Technical Institute; T M Sloan, Crawford Technical Institute, Ireland; S H Uttley, Sheffield University; A G Wilkinson Paddington Technical Institute; also Mr H C Nixon of Limerick, Ireland, The Northern Polytechnic Holloway, the Brixton School of Building and many others.

The inaugural meeting of the National Association of Plumbing Teachers was held on 31st August 1907 at the Regent Street Polytechnic. James Wright Clarke was requested to occupy the Chair at this meeting and Mr T W Fretwell was asked to give a report of events that led to the origin of the meeting. He said that he was requested to communicate as far as possible, with all teachers who are plumbers, asking their views on forming such an Association and after a full discussion with

them it was resolved *"to restrict membership to teachers who are plumbers and such other persons as may from time to time be decided on"*. He also advised that there was upwards of 50 Institutions that had already promised their support.

As this meeting moved on it was now time to appoint the officers of the newly formed National Association of Plumbing Teachers. Mr W Fretwell was elected Secretary; Mr E Thomas Swinson was elected Chairman and a small committee comprising Messrs H Barrett, H W Esau, W Firth, J Gammie, I R Jones and F Knight. The election of President was entered upon and the only name put forward was James Wright Clarke. James thanked everyone for their support but asked to be allowed to decline the honour as he was *"getting on in years"*. It had long been his desire, he said, *"to see an Association of Plumbing Teachers and felt the position should be filled by a much younger man to whom he could give assistance"*. The meeting felt that anyone but James Wright Clarke as the first President would be an injustice to his hard work on behalf of students and teachers generally. Mr Wright Clarke being called on again, agreed to accept the Presidency, a decision that was received with great acclamation.

Also in 1907, James Wright Clarke gave a Presidential lecture (one of many), to the Architectural and Engineering Society on *"Traps their uses and abuses"*. The lecture was given showing diagrams, experiments and his actual experience of defects in drainage systems and later that year another lecture was given on *"Heat and its Uses"*.

In 1908 he was a founder member of Paddington Lodge and on many occasions he delivered lectures on freemasonry at the Paddington Lodge of instruction.

James spent many hours in his "den" at the old polytechnic helping, explaining and advising his boys, both before and after his classes, being always the last one to leave. He was responsible for numerous plumbing and mechanical articles in trade magazines and answered many plumbing queries through their letter pages.

In 1910, at the age 66, James retired from teaching plumbing at the Regent Street Polytechnic as their chief instructor and director of plumbing classes.

In April of that year a retirement dinner was held for him at the Anderton Hotel, Fleet Street attended by some 130 old and present students and many personal friends. During the evening he was

presented with a handsome gold watch and chain as a token of their appreciation and remembrance's of the happy and instructive times spent when attending classes under his charge. Amongst the contributors were several old students who were now established in various parts of the country; also in New Zealand, Vienna, and Toronto etc. Mrs Clarke was also asked to accept a substantial present as a token of their esteem.

After his plumbing retirement, James continued to teach, on a part time basis, special subjects at the Polytechnic, for example, Sanitary Engineering and Sanitary Inspectors' courses. His practical lectures on "Plumbers Work" before the Royal Sanitary Institute.-of which he was a member.-were annual features of the programme and they were always well attended. He was also in considerable demand as a consulting engineer in all matters concerning sanitary work, plumbing and water supply.

He started to become unwell in January 1912; this was at the time when he was at the height of his Masonic career that he had set his heart on. He was Senior Warden in Paddington Lodge and would have been their Master in 1913, but this was not to be.

Over the next few months he slightly improved in health and taught briefly, but finally succumbed to bronchitis and consumption.

James Wright Clarke died at 10pm on 14th June 1912, aged 68 years.

His detailed articles in the Plumber and Decorator Journal on "Sanitary Plumbing" which started in 1887 were still being printed long after his death and it is interesting to note that these articles were continued later by an old student of his, Walter Scott.

James certainly left a great record of what can be accomplished from a poor upbringing, a hard life, perseverance and industry; a splendid example for all to follow.

He was laid to rest in Wandsworth Cemetery Magdalen Road SW18 on Wednesday 19th June 1912.

In August 1912 a letter was sent to the Polytechnic Magazine, the Plumber and Decorator and other journals from Mr H Esau, suggesting, *"a memorial should be subscribed to and erected over his grave as a token of esteem and respect to his memory"*. All subscriptions should either be sent to him in Portman Square or Mr W Fretwell in East Ham. Donations poured in from old students, close friends, Institutions and from various parts of the

world including, Vienna, India, New Zealand, Toronto, and Columbo.

The memorial, in the form of a scroll in white polished marble on a York stone base ledger was erected on his grave, in September 1913 with the fitting words,



J Wright Clarke's Grave

“erected by a few students and friends as a tribute of respect and esteem”.

“Work Ably Done, Rest Nobly Won”

It has given me great pleasure to write this short history of this great man and is my personal contribution to the Centenary of the National Association of Plumbing Teachers.

**John Carnaby Eng Tech LCGI MIPHE RP
April 2007**

In my own working life I was apprenticed in the plumbing trade to Stitson White and Company, Victoria Street, London and was trained at the Northern Polytechnic in Holloway under the direction of W J Woolgar. After 11 years with Stitson White I moved on to Matthew Hall for a further 24 years, starting as a charge hand plumber rising to Senior Site Manager. I then progressed into Building Services Contract Management, finally teaching at two London Colleges, before retiring.

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